



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,505	11/20/2003	Ronald D. McCallister	125.136USR1	1245
94108 7590 10/27/2010 Fogg & Powers LLC/Intersil Americas Inc. 5810 W. 78th Street Minneapolis, MN 55439				
EXAMINER CORRIELUS, JEAN B				
ART UNIT 2611		PAPER NUMBER		
NOTIFICATION DATE 10/27/2010		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@fogglaw.com

### Office Action Summary

**Application No.**

10/718,505

**Applicant(s)**

MCCALLISTER ET AL.

**Examiner**

Jean B. Corielus

**Art Unit**

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/6/10.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-11 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-11, 13-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 10/6/10 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 21-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 21, recites the delay is a "fixed delay". However, the specification, as filed, does not provide proper support for such limitation as claimed. The same comment applies to claims 22 and 23.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 2-5, 8-11, 13-16, 18, 20-23 are rejected under 35 U.S.C. 102(a) as being anticipated by May et al.

As per claim 2, May teaches a transmitter circuit see page 2474, col. 1, line 4 comprising inherently a modulated signal generator for generating a first modulated signal **s (t)** (note that in order to generate the modulated signals (t) a generator has to be used) conveying to be communicated data having a first bandwidth and having a first peak-to-average amplitude ratio see page 2474, col. 2, lines 2-8 and page 2475, col. 1, lines 36-38; generating a constrained bandwidth error signal **K (t)** in response to said first modulated signal **s(t)** (note that in order to generate the error signal **K(t)**, a constrained envelope generator has to be used, hence such an element is inherent in May et al) see page 2475, col. 2, line 1; combining said error signal **K(t)** with the modulated signal **s(t)** see page 2475, col. 2, last three equations (note that in order to combine the signal a combining circuit has to be used, hence a combining circuit is inherent in May) to produce a second modulated signal conveying said to be communicated data having said first BW and said first PAR see page 2475, col. 1 section B- page 2476, col. 1, first full paragraph. In addition, as noted in the inventor submission filed on 7/5/05, a delay coupled between said modulated signal generator and said combining circuit to delay said first modulated signal into synchronism with said constrained bandwidth error signal, is inherent. The inventor further notes (in a

submission under 37 C.F.R. 1.56, dated 8/28/06 in sister application S/N 10/718,507, copy of which is attached,) that the May reference teaches the linerarizer limitation.

As per claim 3, May teaches that the error signal exhibits a BW equal to or less than said first BW see for instance fig. 3 and page 2476 bottom of col. 2.

As per claim 4, peaking unit intervals inherently occur when said first modulation signal exhibits magnitudes greater than a threshold; said constrained bandwidth error signal includes error burst for said peaking unit intervals, wherein each error burst spreads energy over a plurality of unit intervals and exhibits a peak in one unit interval said delay element inherently delays said first modulated signal so that error burst peaks substantially temporally coincide with said peaking unit intervals. See fig. 2.

As per claim 5, said error burst peaks exhibit amplitudes which are responsive to amounts by which magnitudes of said first modulated signal exceeds said threshold

As per claim 8, note that in order to generate the error signal  $K(t)$ , a pulse generator has to be used. Hence, a pulse generator is inherently provided by May note the error signal is filtered using a filter see page 2475, col. 1, section B, lines 13-15.

As per claim 9, a pulse is generated when the modulated signal exhibits a magnitude greater than a threshold see fig. 2.

As per claim 10 said pulse exhibits an amplitude which is responsive to a value by which said first modulated signal exhibits said magnitude greater than said threshold see fig. 2 and page 2475, col. 2, last three equations.

As per claim 11, see claim 2.

As per claim 13, see claim 3.

As per claim 14, see claim 2.

As per claim 15, see claim 4.

As per claim 16, see claim 5.

As per claim 18, see claim 2.

As per claim 20, see claim 4.

As per claim 21, applicant submission filed on July 6, 2005 stated that the delay in May et al is half the pulse shape duration (i.e. fixed).

As per claim 22, see claim 21.

As per claim 23, see claim 21.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6, 7, 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over May et al in view of Hedberg et al US patent No. 6,266,320.

May teaches a transmitter circuit see page 2474, col. 1, line 4 comprising inherently a modulated signal generator for generating a first modulated signal **s (t)** (note that in order to generate the modulated signals (t) a generator has to be used) conveying to be communicated data having a first bandwidth and having a first peak-to-average amplitude ratio see page 2474, col. 2, lines 2-8 and page 2475, col. 1, lines 36-38; generating a constrained bandwidth error signal **K (t)** in response to said first

modulated signal  $s(t)$  (note that in order to generate the error signal  $K(t)$ , a constrained envelope generator has to be used, hence such an element is inherent in May et al) see page 2475, col. 2, line 1; combining said error signal  $K(t)$  with the modulated signal  $s(t)$  see page 2475, col. 2, last three equations (note that in order to combine the signal a combining circuit has to be used, hence a combining circuit is inherent in May) to produce a second modulated signal conveying said to be communicated data having said first BW and said first PAR see page 2475, col. 1 section B- page 2476, col. 1, first full paragraph. In addition, as noted in the inventor submission filed on 7/5/05, a delay coupled between said modulated signal generator and said combining circuit to delay said first modulated signal into synchronism with said constrained bandwidth error signal, is inherent. Furthermore, at a page 2474 col. 2, section A-page 2475, line 1 May teaches transmitting the signals simultaneously using a plurality of codes. It does not explicitly teach that a CDMA modulator is used. However, as evidence by Hedberg et al, it is well known in the art to use a CDMA modulator to generate a plurality of code channels see fig. 2, for instance. Given that fact, it would have been obvious to one skill in the art to implement the generator as a CDMA modulator as taught by Hedberg et al so as to be compatible with system(s) that uses CDMA technology.

As per claim 7, note that Hedberg teaches that the modulator includes a Nyquist pulse shaping (spreading) filter 120a. Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in May et al and the motivation to do so would have been the same as provided with respect to claim 6.

As per claim 17, see claim 6.

As per claim 19, see claim 6.

***Claim Objections***

7. Claims 3 and 9 are objected to because of the following informalities: claim 3, line 2, "envelope" is mistyped as "envelop&". Claim 9 should be terminated by a ":",

Appropriate correction is required.

***Response to Amendment***

8. The declaration under 37 CFR 1.132 filed 10/06/10, is insufficient to overcome the rejection of claims 2-11 and 13-23 based upon the May Reference and the 112 first paragraph rejection as set forth in the last Office action because: the declaration, as a whole, when considered in light of all the evidence of record in the application has little to no weight. For example, opinion that a person skill in the art would not know how to implement the proposed solution unsupported by objective factual evidence is found not to be of substantial evidentiary value. In addition, opinion that the specification provide support for "fixed delay" has not been given any weight, consistent with MPEP

716.01(c) portion of which reads as follow:

134 USPQ 515 (CCPA 1962) (expert opinion that an application meets the requirements of 35 U.S.C. 112 is not entitled to any weight; however, facts supporting a basis for deciding that the specification complies with 35 U.S.C. 112 are entitled to some weight);

***Response to Arguments***

9. Applicant's arguments filed 10/06/10 have been fully considered but they are not persuasive. Applicant argues that the Nihar Jindal's declaration is submitted in support



of the limitation "fixed delay" as recited in the claim. However examiner notes that no weight is given to an expert opinion that an application meets the requirements under 35 U.S.C 112. Applicant further alleges that May does not provide any direction on the using of a delay. Such point of argument has been previously addressed and will not be replicated (please refer to examiner's answer, filed 11/26/08, page 9, section 10 for the examiner's rebuttal). In addition, applicant incorporates physically the content of the declaration submitted by Mr. Nijar Jindal into his remarks. Accordingly, such copied sections of the declaration, addressed above under "response to arguments", will not be readdressed. Applicant further alleged that the inventor, Mr. McCallister, is barred from **attacking the validity of the patent** under the Doctrine of Assignor Estoppel.

However, the examiner notes that the information submitted by the inventor is directed to the "**reissue application**" not the patent. Accordingly, it is the patentability of the claims in **the reissue application** that is in question not the **validity of the patent** since the reissue application is yet to be patented. Secondly, the inventor was merely fulfilling his duty to disclose information known to be material to patentability. And examiner notes that the duty to disclose information exists with respect to **each pending claim until the claim is cancelled**. The doctrine of estoppel does not seem to prevent the inventor from fulfilling his obligation to disclose information material to patentability in a **pending application**. Hence, applicant's contention is in error.

### **Conclusion**

10. This is a continuation (examination) of applicant's earlier Application No. 10/718,505. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the

next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Monday-Thursday from 9:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jean B Corrielus/

Primary Examiner, Art Unit 2611